UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/602,260	BERG ET AL.
	Examiner	Art Unit	
	BRETT FEENEY	3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01/20/2010</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-5,7-9,11-20,22-26,28-31,33-36 and 38-45* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-5,7-9,11-20,22-26,28-31,33-36 and 38-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Status of the Claims

1.   The following **NON-FINAL** Office Action is in response to Applicant's submission received 1/20/2010.

2.   Claims 1, 3, 4, 7, 9, 11 – 18, 20, 26, 31, 36, 41 and 42 – 45 were amended. No claims were added nor canceled.

3.   Claims 1, 3-5, 7-9, 11-20, 22-26, 28-31, 33-36, and 38-45 are pending.

Continued Examination under 37 CFR 1.114

4.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 20, 2010 has been entered.

Response to Amendment

5.   Applicant's amendments received on January 20, 2010 are herein acknowledged and entered.   In response to Applicant's amendments the Examiner has maintained the previous rejection under § 103 and entered a new rejection under § 112, first paragraph.

Response to Arguments

6.   Applicant's arguments received on July 10, 2009 have been fully considered, but are not persuasive. Applicant's arguments are directed towards the newly added claim limitations that are addressed in the rejection under § 103 *infra*.

Claim Rejections - 35 USC § 112

7.   Claims 1, 9, 20, 26, 31, 36 and claims depending therefrom are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner is unable to find support for the newly added limitation "the electronic image is a static non-interactive representation of one of the plurality, of user interfaces defined by the application product" as recited is the above mentioned independent claims. Applicant alleges that support for the newly added claim limitation may be found in ¶ 0026; however the Examiner respectfully disagrees with such an assertion. Further, the Examiner has searched the remainder of the specification is unable to find support for the newly recited limitation. Therefore claims 1, 3-5, 7-9, 11-20, 22-26, 28-31, 33-36, and 38-45 are rejected under § 112, first paragraph.

Claim Rejections - 35 USC § 103

8.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

9.   Claims 1, 3-5, 7-9, 11-20, 22-26, 28-31, 33-36, and 38-45 are rejected under 35

U.S.C. 103(a) as being unpatentable over Juan Sanchez Diaz et al., "From User

Requirements to User Interfaces: A Methodological Approach," 13th Int. Conf.,

CAiSE 2001, in 2068 Lecture Notes in Comp. Sci. 60 (K.R. Dittirch, et al. eds.,

Springer June 4-8, 2001) (herein Diaz), in view of Charisius et al., US

2002/0104071, (herein Charisius).

Claim 1

Diaz discloses a method implemented in a computer system comprising:

- *identifying a business process* (see Fig. 1 & Fig. 3 and associated text; noting

the business process "order entry system". Further, Diaz provides an overview of

the paper, which is directed towards software engineering and generating user

interfaces for a business process.);

- *identifying an application product, wherein the application product pertains to the*

business process (*Id.* Further, see Fig. 5 and associated text; noting the

application for MSC New Order defines a workflow for the business process,

event handling, object relationships, condition semantics and allows a graphic

representation of the case. Further, see Diaz at 69; noting "a view model is

obtained by generating a form that contains a set of forms that can be called up directly form the application menu.");

- *associating a business process model with a plurality of views, wherein each of the plurality of views comprises an electronic image representing one of a plurality of user interfaces defined by the application product (Id.* Noting "[t]he specification is formed by a group of state transition diagrams that describe the system behavior. One diagram for each user interface object and another for each control object that appears in a selected MSC are generated." Further noting, user interfaces are generated based on the input(s) and output(s) of the business process selected as defined by the underlying application *inter alia* "If A (New Order" is one case that uses case B (Search Customer), then there is a button placed in the form associated with A which allows navigation towards the form associated with B." Further see FIG 9 and associated text on pages 71 – 72; noting a plurality structured use cases associated with the model include both interactive and static views associated therewith.);

- *the electronic image is a static, non-interactive representation of one of the plurality of user interfaces defined by the application product (Id.* Further, see also page 72; noting "[t]he setting then generates a static view." Further noting, the view of presentation static or non-static may be selected. Even further noting, the interactive objects and data used either on the back end or via an alternate interface may be used to generate the static electronic image that describes the changes to the underlying logic.);

- *the business process model pertains to the application product (Id.);*

- *the application product is configured to present the plurality of views, and the plurality of views illustrates realization of the business process within the application product (Id.* Noting, "[o]ne diagram for each user interface object and another for each control object that appears in a selected MSC are generated". Further, see Fig. 5 and associated text; noting the modeled (i.e. realized) business process wherein subsequent views illustrate further detailed views related to increased levels of granularity for the modeled process.);

  Diaz does not explicitly disclose, however in analogous art Charisius teaches:

- *simultaneously displaying the business process model and the plurality of views within a single user interface displayed on an electronic display of the computer system* (see FIG 13 and associated text; noting the process model view, underlying code, root directory and a plurality of options for editing/changing the view are simultaneously provided on within a user interface of an exemplary computer.);

- *in response to a user selection of a first view among the plurality of views, presenting an interactive representation of the first view, wherein the interactive representation of the first view accepts user input and generates a result in response to the user input (Id.* Further, see ¶ 0034; noting "allows a developer to simultaneously view a graphical and a textual display of source code. The graphical and textual views are synchronized so that a modification in one view is automatically reflected in the other view. The software development tool is

designed for use with more than one programming language." Further, see ¶

0036; noting "receives a request to generate a distributed computing component,

generates code corresponding to the distributed computing component, where

the code contains a function that is one of a plurality of function types, and

displays a graphical representation of the code that includes a separately

delineated display area for each of the plurality of function types.").

It would have been obvious to a person having ordinary skill in the art, at the time

of the invention, to combine the method implemented in a computer system taught by

Diaz with the step of simultaneously providing a single user interface on an electronic

display of a computer system taught by Charisius because the claimed invention is

merely a combination of old elements, and in the combination each element merely

would have performed the same function as it did separately, and one of ordinary skill in

the art would have recognized that the results of the combination were predictable.

Claim 3

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *further comprising creating, using the processor, the business process model for*
  the application product using data from an external file (see Table 1 and
  associated text; noting the model uses this data for defining the application
  product, the table being an external file. Diaz does not explicitly recite that an
  external file is received via a processor, however, in analogous art Charisius
  does(see Fig 6 and associated text; noting the processor is linked to the internal

and external databases. Further see FIG 21 and associated text; noting the external source code file is obtained from a remote (i.e. external) source.)).

It would have been obvious to a person having ordinary skill in the art, at the time of the invention, to combine the method implemented in a computer system taught by Diaz/Charisius with the step of obtaining data from an external file via a processor. taught by Charisius because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 4

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *wherein the business process model is created in a modeling language* (see Diaz at p 66; noting the use case model uses UML, a standard and well-known modeling language).

Claim 5

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *wherein the business process model comprises graphical representations of a plurality of activities within the business process* (*Id.* at **Claim 1**. Further, see Diaz Fig. 7 and associated text; noting the UI is graphical and is used to represent activities of the requirements.).

Claim 7

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *wherein associating the business process model comprises creating the plurality of views corresponding to a plurality of user interfaces defined in the application product* (see Figs. 6 & 7 and accompanying text, noting that the interfaces specified in Fig. 6 are displayed in Fig. 7.);

- *storing an identifier of each of the plurality of views in a repository* (*Id.* Noting, that "code" and "labels" are stored in order to identify purpose and function. Further noting, each use case is "stored" in the "repository" according to its identifier e.g. "customer code", "customer name", etc.);

- *associating, using the processor, the identifier of each of the plurality of views with at least one of a plurality of activities represented in the business process model* (*Id.*);

Diaz does not explicitly recite, however Charisius teaches:

- *wherein the repository is stored in a computer-readable storage medium of the computer system* (see ¶ 0118; noting "aspects of the present invention are described as being stored in memory, one skilled in the art will appreciate that these aspects can also be stored on or read from other types of computer-readable media, such as secondary storage devices, like hard disks, floppy disks or CD-ROM; a carrier wave from a network, such as Internet; or other forms of RAM or ROM);

- *wherein the identifier of the each of the plurality of views and the at least one of the plurality of activities are associated with one another in the repository* (see FIG 4 and associated text; noting "Name 410 and Assets 412, which are defined as attributes (strings 414), are contained in SCI members 506. Since these elements are in the same project, all are linked. The data structure 500 also identifies the language in which the source code is written").

It would have been obvious to a person having ordinary skill in the art, at the time of the invention, to combine the method implemented in a computer system taught by Diaz/Charisius with the computer-readable storage medium and linking activities within the repository taught by Charisius because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 8

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *wherein the application product is a standard application product defined for a specific industry* (see Fig. 2 and associated text; noting payment is depicted (i.e. transactional industries such as retail, grocery, etc.). Further noting, other figures define other applications.).

Claims 9 and 11 recite limitations substantially similar to the claims above. Therefore, claims 9 and 11 are rejected for similar reasons.

Claims 12-14 and 17 Diaz fails to explicitly disclose deleting, adding, and replacing one of the plurality of views in response to a user request [note that the modifying of claim 17 would fall under 'replacing']. However, the Examiner previously took **Official Notice** that it is old and well known to edit things using standard cut, copy, paste, and delete. Editing is a known method for improving things by allowing flexibility in creating processes. The use of editing is predictable to one of ordinary skill in the art because everyone is familiar with its concepts. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to apply standard editing practices to a process in order for that process to be modified when things change. Further, the Examiner notes that support for the Official Notice may be found in Charisius (see FIG 1 and associated text; noting updates, modifications, changes, etc. are updated and maintained in the repository. Further noting, attributes (i.e. requirements are maintained in the repository). Further, see ¶ 0035; noting the software development tool taught by Charisius allows the user to alter views to facilitate the development of applications by employing a plurality of graphical and textual displays simultaneously. Further, see FIGs 32-35 and associated text; noting ¶ 0179 "adding requested code"; ¶ 0137; "replacing string operations"; see ¶ 0220; noting "editor for viewing and modifying"; etc.).

Claim 15

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *receiving a user request to navigate to one of the plurality of views in the application product; determining a view identifier; and passing a command to the application product to trigger display of a user interface associated with the view identifier in execution mode* (see Fig. 7 and associated text; noting that the "search customer" view is provided upon request to view the prototype.).

Claim 16

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *creating a first set of business requirements using the business process model; and transferring the first set of business requirements to a business requirement database* (see e.g. Table 1 and associated text; noting a database storing business requirements).

Claim 18

Diaz/Charisius teaches the limitations above. Furthermore, Diaz discloses:

- *maintaining existing relationships between components of the business process model when creating the first set of business requirements* (see Fig. 5 and associated text; noting relationships are maintained according to the MSC.).

Claims 19, 20, 22 - 26, 28 - 31, 33 - 36, 38 - 45 recite limitation addressed in the

claims above. Therefore claims 19, 20, 22 - 26, 28 - 31, 33 - 36, 38 - 45 are rejected

for similar reasons.

Conclusion

The following references were not applied as prior art in the instant office action under § 102 or § 103, however they are considered relevant to the instant application.

- Fontana et al., US 6,167,564; discloses a system and method for developing and integrating business process applications.

- Sheard et al., US 6,208,345; discloses a system and method for building and integrating workflows using a plurality of graphical representations of business and system components.

- Bowman-Amuah, US 6,256,773, US 6,289,382, US 6,601,234; discloses a plurality of systems and methods for versioning software applications; including providing a plurality of interfaces for object oriented development.

- Dong et al., US 2002/0104071; discloses a method and system for converting application languages for integrating business applications.

- Charisius et al., US 2002/0016954; discloses a software development tool that allows developers to model processes using graphical and semantic arguments concurrently.

- Chong et al., US 2002/0184610; discloses a visual development tool for integrating and modeling multi-modal applications.

- Kern et al., US 2002/0188597; discloses a methods and systems for building and versioning workflows.

- Caswell et al., US 6,662,355; discloses systems and methods for business process modeling using BPA.

- Coad et al., US 6,931,625; discloses a tool for graphical software development using UML.

- Little et al., US 7,047,518; discloses a software development tool for designing and constructing software applications using UML object modeling.

- Benny et al., US 7,487,079; discloses an architecture for modeling IT systems using reusable IT solutions and integrating architectural components therein.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Brett Feeney** whose telephone number is **571.270.5484.** The Examiner can normally be reached on M - R 7:30 - 6:30 EST. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **KAMBIZ ABDI** can be reached at **571.272.6702.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

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